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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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STUART B. BERMAN

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O'Melveny & Myers LLP
IP&T Calendar Department LA-1118
400 South Hope Street
Los Angeles, CA 90071-2899

EXAMINER

RYMAN, DANIEL J

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

12/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/330,755

Applicant(s)

BERMAN, STUART B.

Examiner

Daniel J. Ryman

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50, 51, 53 and 66-73 is/are pending in the application.
- 4a) Of the above claim(s) 66-73 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50, 51 and 53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 15 November 2007 have been fully considered but they are not persuasive. In this Response, Applicant emphasizes that the combination of Bennett and Gulick teach away from the claimed invention, where "[t]his diametrically opposite teaching can not be filled in by yet third and fourth references." Response: pp. 7-8. Examiner notes that Applicant already raised this argument in the appeal Applicant took from the Final Rejection mailed 9 April 2003, *see* Appeal Brief received 6 April 2007, pp. 4-5 and Reply Brief received 22 July 2004, pp. 1-2, and the Board of Patent Appeals and Interferences affirmed Examiner's rejection, *see* Decision on Appeal by the Board of Patent Appeals and Interferences, mailed 24 March 2005, pp. 6-10. Thus, in light of the Board's holding that the combination of Bennett, Gulick, and Lowell rendered the claims at issue obvious even though Bennett and Gulick taught away from the invention, *id.* at 6-10, Applicant is now estopped from re-raising this issue.

2. Examiner notes that Applicant could theoretically argue there has been a change in the law since the aforementioned appeal, due to the Supreme Court's decision in *KSR v. Teleflex*, such that Applicant should be free to re-raise this issue. However, *KSR v. Teleflex* did not change the law with respect to the reasoning followed by Examiner and affirmed by the Board of Patent Appeals and Interferences. Applicant seemingly admits this point by stating, "[t]he recent Supreme Court decision of *KSR v. Teleflex*, 127 S.Ct. 1727, 1740-41 (2007) reaffirmed that an invention incorporating known parts must still be judged according to the law set forth at 35 U.S.C. § 103." Response: p. 7. Since there is nothing in the aforementioned Decision on Appeal that suggests the Board based its decision on anything that would have been overturned by *KSR*

v. *Teleflex*, Examiner submits that the Decision on Appeal by the Board of Patent Appeals and Interferences mailed 24 March 2005 continues to govern this issue, such that Applicant is estopped from re-raising this issue.

3. In light of the foregoing, Examiner maintains that, even though the combination of Bennett and Gulick teach away from the claimed invention, the combination of Bennett, Gulick, Lowell, and Crayford nonetheless render the claims obvious.

4. In addition, Applicant asserts that Examiner has used hindsight “to pick and choose *four* references required to even assert obviousness of the pending claims.” Response: p. 8. In response to applicant’s argument that the Examiner’s conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant’s disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

5. Further, Applicant suggests that the mere fact that Examiner has used four references is “compelling evidence of non-obviousness.” Response: p. 8. In response, Examiner submits that reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

6. In view of the foregoing, Examiner maintains that the claim are obvious in view of the cited prior art.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 50, 51, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al (USPN 5,592,160), of record, in view of Gulick (USPN 4,809,269), of record, in further view of Lowell (USPN 5,341,476), of record, in further view of Crayford et al. (USPN 6,151,316), of record.

9. Regarding claims 50 and 53, Bennett discloses a method and a port control module (ref. 340) for use in a fiber channel switching fabric comprising (col. 4, lines 22-45): a fiber channel input/output port for connection to a link (col. 1, line 57-col. 2, line 5), an encoder/decoder in communication with the input/output port (col. 2, lines 37-63) where “encoding” and “decoding” indicates the presence of an encoder/decoder, and a buffer (col. 2, lines 15-22 and col. 4, lines 39-45); where the module places received fiber channel data in the buffer before sending the data to another module (col. 2, lines 15-18), and monitors the buffer for an overflow condition (col. 5, lines 49-66) with an overflow buffer indicating a monitoring of an overflow condition. Bennett also discloses buffer overrun prevention (ref. 436, overflow buffer) (col. 5, lines 58-66).

Bennett does not expressly disclose the inclusion of buffer overrun prevention logic between the encoder/decoder and the buffer, wherein the buffer overrun prevention logic (i) sets tag bits in response to an overrun condition and (ii) operates on the tag bits and not the data bits. Gulick teaches, in a port controller, having buffer overrun prevention logic before the buffer (col.

30, lines 25-39). Since the buffer overrun prevention logic is before the buffer, an obvious place to locate it would be between the buffer and the encoder/decoder. Gulick uses the buffer prevention logic in order to signal the system to terminate a packet that has been corrupted by buffer overflow through the use of tags, where the buffer overrun prevention logic operates on the tag bits and not the data bits (col. 30, lines 34-39, where, during an overrun, "the last byte in the FIFO is tagged as the last byte in the packet," which indicates that the tags are added to the last byte, such that the buffer overrun prevention logic operates on tags and not data). It would have been obvious to one of ordinary skill in the art of data communications to include buffer prevention logic before the buffer and to tag words that overrun the buffer, by operating on tags and not data bits, in order to signal the system to terminate a packet that has been corrupted by buffer overflow.

Bennett in view of Gulick does not expressly disclose the buffer overrun prevention logic tags, but does not terminate, words that overrun the buffer. Lowell discloses in a buffering system that a variety of overflow buffer configurations are possible, including a "Reject" type of buffering in which the newest data in the buffer is overwritten by the overflow data (col. 3, lines 31-33; col. 7, lines 4-25, esp. col. 7, lines 15-25; and col. 8, lines 50-66). It is obvious that by using a "Reject" type of buffering that the port control module of Gulick is relieved of the need to terminate packets. Instead, once an overflow is detected, the port control module simply needs to flag the packets that are in overflow and pass the packets to the buffer where all overflowed packets will be terminated when a newer overflowed packet overwrites it. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have the buffer

overflow prevention logic tag, but not terminate, words that overflow the buffer in order to relieve the prevention logic of the task of terminating the packet before it reaches the buffer.

Bennett in view of Gulick in further view of Lowell does not expressly disclose that the buffer overflow prevention logic sets tag bits to a unique value indicative of an overflow condition. However, Bennett in view of Gulick in further view of Lowell does disclose tagging a packet in order to signal the system to terminate a packet that has been corrupted by buffer overflow (Gulick: col. 30, lines 25-39). In spite of this, the tagging of Bennett in view of Gulick in further view of Lowell only signals the switching system rather than other network elements regarding the status of the buffer. Crayford teaches, in a switching system, using an overflow tag to signal other network elements regarding possible data loss due to the overflow (col. 12, lines 56-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the buffer overflow prevention logic set tag bits to a unique value indicative of an overflow condition in order to signal other network elements that the data packet could have been corrupted due to a buffer overflow.

10. Regarding claim 51, Bennett in view of Gulick in further view of Lowell in further view of Crayford discloses that the buffer is FIFO (Bennett: col. 2, lines 60-63; Gulick: col. 30 lines 25-27; and Lowell: col. 7, lines 15-20).

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel J. Ryman
Examiner

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Daniel Ripman